DOCUMENT RESUME

ED 119 828 PS 008 390

AUTHOR Cooney, Ellen Ward
TITLE Social-Cognitive Development: Applications to Intervention and Evaluation in the Elementary Grades.
INSTITUTION Harvard Univ., Cambridge, Mass. Graduate School of Education.
SPONS AGENCY Guidance Associates, New York, N.Y.; Spencer Foundation, Chicago, Ill.
PUB DATE Aug 75
NOTE 22p.; Paper presented at the Annual Meeting of the American Psychological Association (83rd, Chicago, Illinois, August 30-September 3, 1975)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage
DESCRIPTORS Curriculum Development; *Curriculum Evaluation; *Elementary Education; *Experimental Curriculum; Grade 2; Grade 3; Group Discussion; Instructional Films; Intervention; Peer Relationship; Pilot Projects; Role Playing; *Social Exchange Theory; *Social Relations
IDENTIFIERS *Social Development (Psychological)

ABSTRACT

This paper reports on the development, evaluation and implications of a primary grade social development curriculum based on structural, developmental, and social perspective taking theory. The curriculum was used in a preliminary pilot study and in a formal 8-week intervention program with 14 second and third grade classes. The social intervention procedure used in this study consisted of situations in which children received feedback which allowed them to experience indecision and exposure to slightly more adequate reasoning. A series of 16 filmstrips showing hypothetical conflicts were developed, and follow-up activities (small-group discussions, role play and debates) were planned to ensure children's active participation. Program evaluation indicated that little structural change had occurred and the view is expressed that process rather than stage changes more adequately reflect program effectiveness. Such process variables were incorporated into the evaluation tests by introducing a group interaction measure, videotapes, and tape recordings. Results obtained tentatively suggest that considerable change occurred in individual children and in interaction of the groups. (GO)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED119828

Social-cognitive Development: Applications to Intervention and Evaluation in the Elementary Grades[1]

Ellen Ward Cooney

Harvard Graduate School of Education

PS 008390

Paper presented at the 1975 Convention of the American Psychological Association.
Symposium: Developmental Counseling Psychology: Early Childhood and Primary Years.

Introduction

Urie Bronfenbrenner likes to tell the story of Walter Fenno Dearborn, his first mentor at Harvard, who apparently looked him in the eye one day and announced, "Bronfenbrenner, if you want to understand something, try to change it." Although differing from Bronfenbrenner both in specific interests and theoretical orientation, I would like to take this issue--the implementation of change and its relationship to theoretical understanding of development--as the focus of the present discussion. More specifically, this paper will report on the development, evaluation and implications of a primary grade social development curriculum based on structural developmental and social perspective taking theory. We will first consider the implications of this theory for intervention and suggest that such practical application can serve two interrelated goals: 1) helping the child, and 2) furthering our theoretical knowledge of development. The second part of the paper will focus on the actual construction of this curriculum. Finally, we will discuss the intervention evaluation. I will argue that although the stage change outcome measures commonly used to evaluate the "success" of such a program can provide some useful theoretical insights, they are both incomplete and further, tell us little about the value of the program for the child. I will conclude by suggesting some directions for evaluation that, I believe, can provide greater insights into both the process of development and the educational value of a structural developmental intervention program.

Why Intervention?

Value for the Children

A question commonly asked of those attempting to apply structural developmental theory to educational intervention is "why?". If development really proceeds through universal and invariant stages as is claimed, why try to teach something that will develop anyway? Moreover, even if one could stimulate development through these stages, is this not simply another manifestation of that peculiarly American tendency

to try to do everything faster, bigger and better than even nature herself. What purpose does this serve?

Although such concerns are probably useful cautions for those who like the proverbial mountain climbers want to change something simply "because it's there," there are valid reasons, both theoretical and educational, for intervention. And such skepticism represents, I believe, a misunderstanding of both the meaning of universality and of the even more basic issue of the nature and function of social cognitive stages.

In the first place, the cognitive developmental assumption that development passes through a universal and invariant sequence of stages does not imply that development through all stages for all children is predetermined: development is, rather, a result of the interaction between certain tendencies in the child and other generally common experiences with the environment. True, for most children the result looks like a predetermined sequence: such children pass through the same stages at about the same age as do most other children.

The significance of the interaction hypothesis for intervention, however, becomes apparent when we look at those children who for some reason do not reach these levels at the same time as most and who may, in fact, never develop very far through this sequence on their own. Such a pattern, as Selman has noted in the previous paper, is frequently seen in behaviorally and emotionally disturbed children and appears to relate to their inadequate social adjustment (Selman, in preparation). It is all to easy to interpolate from the apparent predetermination of most children to the belief that such slow or stopped developers as well are "predetermined" never to reach higher stages While not denying that some basic cognitive inability may play an important part in this, structural developmental theory forces us to recognize the role the facilitating conditions supplied (or not supplied) by the environment may play as well. It suggests that we must look for causation somewhere in how this particular child, with his particular cognitive capacities, interacts with his environment, with its particular

facilitating conditions. And this raises the possibility of helping at least some such children to reach higher levels than they would without this intervention by altering parts of the environmental part of this system.

Such considerations speak mainly to the special child--the one who is developing significantly slower than most children. What about the child who is developing within the limits of normal timing? For such children this stage change does not seem an important goal; they are developing normally and we have little reason to believe that speeding such development has any advantage to the child. There are, nonetheless, valid reasons for intervention with such children as well. But these reasons lie not in this area of stage change, but in that of application of existing levels of reasoning.

In order to understand this it should be recalled that structural developmental theory assumes that children who develop do so through an invariant sequence of stages; but it does not hold that all individuals eventually reach the highest possible stage, or that once one has reached a certain level of reasoning ability that he always applies it in his reasoning about all areas of social interaction. A child, for instance, may have the cognitive ability to realize that others have perspectives different from his own but rarely use this; or he may apply it only in certain areas, say in relation to thinking about parents or teachers but not in regards to his peers. In his work comparing clinic and regular children, Selman has found that these clinic children are more apt to show this extreme disparity in the level of social reasoning used according to the specific content area. But even "normal" children use different levels when thinking about different social relationships. Further, some frequently use such reasoning while others rarely apply it in their daily social interactions.

Such failure to apply one's reasoning ability has implications both for the child's present functioning and for his future development as well. In the first place, a child's failure to exercise his perspective-taking abilities in specific areas may lead to problems in certain areas of social interaction. For instance, a child who fails to realize that his friends may have different wants, needs or motives

than his own may end up an outcast, with few friends of his own. This, of course, can lead to emotional problems, feelings of insecurity and so forth. Likewise, a child who fails to apply such reasoning in his dealings with his teacher may be an unruly and unmanageable student, even though he is popular with his peers.

Finally, and of most direct relevance to the average child in the regular classroom, the frequent failure to apply one's social perspective taking abilities to a broad range of areas may have significant implications for future stage development. According to theory, it is through practice and experience at a given level that one develops to the next level. And a child who has not had broad experience and practice applying a given level of reasoning may experience progressive difficulty in developing new levels of reasoning or in applying these in the future. And this may eventually lead to a halt in such development before the highest stages have been reached or, at least, to an increasing failure to apply such higher level reasoning in daily social interactions.

In sum, then, intervention can be of potential help both to problem children and to those who seem to be developing normally. For problem children, the goal is to stimulate stage change or to help the child apply an existing level of reasoning to a specific area. The average child, however, does not need this kind of remedial help. And for him, the value of social cognitive intervention can be to give him the broad practice and experience of applying his social reasoning abilities that will contribute to his eventual attainment and use of the highest levels of social perspective taking.

Value for the Theory

In addition to this potential value to the child, intervention with cognitive developmental principles can be useful to the continued development and refinement of theory as well. In recent years, considerable work has been focused on extending cognitive developmental theory, previously focused mainly on intellectual development, into the interpersonal and affective realms. As a result, we have relatively detailed descriptions of the structure of the child's social reasoning at various stages and

careful theoretical analyses of why one stage is logically more advanced than the previous ones. Yet the most basic task of the developmental theorist is to understand the process of change--not just its form. And ironically, this is probably the weakest aspect of structural developmental theory at this time. There are, of course, assumptions about the general principles and mechanisms of change. In contrast to traditional psychoanalytic, psychosocial and social learning approaches, structural developmental theory argues that cognitive re-organization underlies such developing patterns and, moreover, stresses that the child is actively constructing the organizing structures with which he deals with the world rather than passively "being changed" by either external or internal forces.

Further, according to this theory, two basic mechanisms are necessary to stimulate progression to the next stage of reasoning. First, the individual must experience a situation as a dilemma, one not easily resolved according to his present assumptions and ways of reasoning about the problem; he must feel some indecision or conflict over its correct resolution or interpretation. Secondly, exposure to reasoning slightly more adequate than his own for the resolution of the problem may facilitate development to the next stage. In respect to this, there is considerable evidence that once a child is in this conflict situation, he will actually prefer reasoning slightly more adequate than his own to reasoning either at his own level or below it. However, if reasoning is too far above his present understanding, he will simply reinterpret it at his own level and it therefore will not lead to significant development (Turiel, 1969).

Nonetheless, although we have ideas about these general developmental mechanisms, we know little about the details of how the child actually progresses from one stage of social reasoning to the next. This is a major reason why an educational curriculum from developmental theory is so difficult to develop and to evaluate, but also a major reason why it is so potentially fruitful. For if thoughtfully devised, a study of the effects of such an intervention can perhaps throw some light on our theoretical understanding of development by providing insight into the details of this process.

Because of its potential value both to the child and to the theory, then, we undertook to devise a social development curriculum and planned intervention program to study its effects. In the next few minutes, I would like first to discuss the considerations involved in translating structural developmental theory into a social developmental curriculum, and then to consider the evaluation of such research to help answer both theoretical and practical educational questions.

Translating Theory into Practice

The process of moving from structural developmental theory to educational practice involves operationalizing the developmental principles of 1) conflict and 2) near matching into a curriculum which takes into account the active self-constructed nature of the child's reasoning.

One of the striking features of social interaction as compared with interaction with the physical world is the much greater complexity of the social feedback system. The physical world responds to the child and his actions on it in a relatively visible and uniform way. A balance beam, for instance, always tilts when a child adds a weight to one side and this effect is readily observable. Moreover, if the child performs this same action ten times, he will see the same reaction all ten times. This then provides relatively direct feedback as to whether this reality is in agreement or in conflict with the child's assumptions about it. The social world, however, provides nowhere near this visibility or uniformity of feedback. A child may go for years without ever becoming aware that his actions are affecting others, let alone affecting them in a predictable way. People may hide their reactions and the effects of one's actions on others are often not readily observable. Secondly, and of equal importance, is the lack of uniformity of social feedback even when it is provided. People respond differently to the same actions. A five-year-old, pushed by another, may cry or run away--relatively direct feedback. An adult, on the other hand, may show very different behavior: he may, of

course, push or hit back; or he may ignore it, believing that the child did not intend to bother him.

The first need of a social intervention procedure, then, is to create a situation which will give children the kind of feedback that allows them to experience indecision and exposure to slightly more adequate reasoning. The most naturalistic method, of course, would be to focus on issues naturally arising in class and to use these as the basis for discussion. However, for several reasons, both theoretical and practical, this did not seem the best place to start. In the first place, although conflict frequently occurs in classrooms it takes a teacher or counselor initially quite sophisticated in developmental theory to recognize which of these are of a level and subject that would lead to a useful developmental discussion and provide the most productive feedback to the child. Certainly not all conflicts occurring in classrooms are of this sort. Secondly, even if a teacher could learn to do this, many such conflicts occurring between individual children are not relevant or interesting to others in the class, or do not occur at a time when the teacher is able to focus on this issue. Finally, and of considerable importance, the focus of this discussion must be on reasons so as to provide the child with feedback as to how others perceive a situation and how they reach varying conclusions. But in many of the problems naturally arising in class, the children—or the teachers—are so emotionally involved in the outcome of the discussion that getting anyone to focus on reasoning at this time of emotionality is a difficult task at best. This problem is illustrated particularly strongly in some pilot work we have done with clinic children. For many of these children even some of our hypothetical dilemmas are so close to them that they simply become unable to discuss the issue involved. And we have in fact found that attention to those dilemmas which children find particularly difficult to discuss is a very useful guide to emotional conflict in the child.

For these reasons then it seemed worthwhile to develop a series of hypothetical conflicts that could be presented to the children. This would allow us to decide which

conflicts seemed developmentally most productive, give the teacher the opportunity to think about the dilemma beforehand, and provide the children a forum to consider issues and learn how others respond to them without this discussion having a concrete outcome in which at least some are emotionally involved. Once, the children and the teacher have become accustomed to dealing with this kind of issue in this way, such discussions could later be extended to real conflict actually arising in class.

As a result, a series of 16 sound filmstrips were developed.[2] Although all the dilemmas differ in content area, covering a variety of topics believed relevant to the development of interpersonal reasoning in various areas of the child's social interactions, the form of each is similar:

1. They each present dramatic stories which are enjoyable and involving for elementary aged children.
2. They each present a conflict between two possible resolutions to a problem seen to be in conflict by children of this age and which are best resolved by considering another person's point of view.
3. They are open, so children of this age disagree how the conflict should be resolved and have difficulty making up their minds.
4. They do not give a "right" answer or ending to the story, but rather present varying reasons slightly below, at and above the level of most of the children in the class.

In the previous paper Selman has described one of these dilemmas. Briefly, it involves a girl's dilemma of whether to keep a planned date with a longtime friend or to break this and to do something with a new girl in school. Within the story line are presented reasons for both courses of action, but this is left unresolved at the end. And the best resolution seems to involve a consideration of how each of the friends—the new girl and the old chum—will feel.

The presentation of the particular filmstrip is only a small part of the curriculum, however. For although the films do encompass the mechanisms of conflict and near matching, they do not ensure that the children <u>actively</u> experience this. A child, for instance, may simply decide that the answer is

obvious and not recognize the dilemma inherent in the situation, or the pluses and minuses of each possible resolution.

As a result, following the films we have several suggested activities to ensure such active consideration. First of all, following each film the children are organized into small groups in which they discuss the issues, giving reasons for their choice and debating about whether some reasons are better than others. The teacher's role is to act as a guide, keeping the discussion on the topic and helping it along as necessary. The purpose of these discussions is to help the children actively focus on the dilemma, to realize that there is more than one possible resolution to the problem, and to provide them with direct feedback as to what others are thinking and feeling. Thus, even if the individual child believes that he knows the correct resolution, he is exposed to peers who may disagree with him and force him to reconsider or at least to defend and think about his position.

A final effort to ensure that the children actually experience the dilemma within themselves is the use of roleplaying and debate following these peer discussions. For instance, a child who maintains that the girl should go with the new friend is asked to play the part of the longtime chum to help her experience the feelings this friend might have; or the child who says it is clear she should go with her old chum plays the part of the new girl. The gulf between the perceived feelings and earlier assumptions, then, will hopefully result in the active experience of conflict between old and new assumptions and interpretations.

The purpose of debate is similar. After the chidlren finish discussing the dilemma in groups, the teacher asks for several voluntrers to argue each side in a class debate. The other children are told to indicate their views by sitting with the team with which they agree. Children undecided as to the best resolution sit in the middle, between the two sides. During the course

of the debate children are encouraged to move from side to side as their opinions are changed by the debaters. A child who moves is asked to explain why he has done so—what reason swayed him. Again, it is believed that this kind of physical representation leads to the children's internal experience of indecision and conflict. Further it was hoped that this kind of legitimization of indecision and of changing one's mind when one hears better answers would perhaps lead to a greater willingness to admit and attempt to resolve such confusion in the future as well.

Finally, this curriculum is also designed to have an effect on later developmen As we have noted, the kinds of dilemmas presented in the films are similar to those faced by the children all the time in their social interactions. A final aim of this curriculum is to give the children (and the teacher) practice in recognizing situatio as interpersonal dilemmas and experience in reasoning out a solution. Both the teach and children are encouraged to use similar discussion methods in future social interaction as well.

Evaluating Intervention Results

In order to examine the effects of this curriculum we have used it in two studies—a preliminary pilot study (Selman & Lieberman, 1975) and a formal eight-week intervention program with 14 second and third grade classes (Cooney & Selman, in preparation). Earlier I suggested that this kind of intervention can potentially serve two ends: helping the child and furthering our theoretical knowledge. In the remain of this paper, I will discuss the evaluation of these studies in terms of these two g I will conclude by suggesting that attention to the process that actually occurs in t classroom during the program can provide greater insights into both the process of development and the value of the program for the children involved than do traditiona stage change measures.

First, let us look at the theoretical implications. The first and most common goal is simply to determine whether a program can in fact lead to stage change;

hopefully this will tell us whether these developmental mechanisms of conflict and near matching, at least as translated into actual practice, can stimulate development. But one can learn a great deal more than this simple "does it work" from intervention studies; we can learn something about how it works. In the previous paper, Selman has described two levels of analysis of structural social development: changes in social perspective taking structure and changes in interpersonal conceptions. He has suggested that although perspective taking structure must logically precede the development of the related interpersonal concepts, this does not necessarily imply that this structure must develop before the conceptions or set a limit on possible conceptual development. Rather, it is possible that the two develop at the same time and, he suggested, it may be that intervention at the more surface level may stimulate deeper structural development. The attempt to clarify this relationship, then, seems a useful goal and one particularly related to this kind of intervention.

For this purpose we used two kind of measures. The first, a modification of Flavell's nickel-dime game, was chosen to evaluate the child's basic perspective taking structure. Second, to evaluate the child's modal level of interpersonal conception, we used an interview about a filmed dilemma similar to those in the intervention. In addition, to detect changes in any of the child's individual concepts, this latter interview was then scored for the highest level concept shown.

Although far from conclusive as to our ability to stimulate stage change with this curriculum, our preliminary analysis does reveal an interesting pattern of change. Neither experimental or control groups showed any uniform change over the seven month period in perspective taking structure. On level of interpersonal conceptions, on the other hand, both experimental and control groups changed about a third of a stage. Furthermore, although there was no overall difference in the amount of change in conception between groups, there

was a trend for experimental children who initially were lagging behind the majority to develop more than their control counterparts. Finally, when the data was scored for the highest level of interpersonal conception shown by the child, we found a trend for more change in the experimentals than in the controls. A similar pattern of change in a specific concept was found in our pilot study, scored only for the level of conception of intentionality. Here the experimentals showed a significantly greater development in this concept than did the control group.

Although such results do not argue for the ability of this program to effect stage change in the period measured, they do provide some interesting insights into the stability or flexibility of the different levels of social reasoning. It suggests that it is difficult to stimulate structural change, at least in this time period. But it appears to be somewhat easier to stimulate children to apply existing levels of structural ability to their interpersonal conceptions. And it is even more possible to get them to start using specific concepts--say of friendship or of intentionality— that are at a higher level than their general level of interpersonal conception.However given the limited amount of change we found in any area, it remains an open question as to whether such concept changes apparently stimulated by this program will eventually lead to development in structure and overall interpersonal conceptions as well. And for this, a longer term study that analyses at intervals the patterns of development in these different levels is needed.

Although providing some theoretical insights, then, this study also points out the limitations of trying to effect and study the process of development in this way, for we really have very little change to work with. What conclusions should we then draw as to the theoretical or educational value of such intervention? This, of course, is a crucial issue for those considering the use of this social developmental curriculum. After all, we saw little stage

change. Does this not prove that such efforts are only of limited theoretical use and of even less value to the child?

I think not and believe, further, that the problem lies in our traditional reliance on stage change as a major measure of the effect—and the effectiveness—of such programs. For although these do provide some useful information, they tap only a very limited aspect of the development that may be occurring—stage movement. And although it is a valid theoretical goal simply to determine whether we can in fact effect stage change, we should also be trying to learn from this kind of a program how this process actually occurs: what changes do we see in the children over the course of the program that might give us some insight into how development actually comes about in the child—do children interact differently, do they seem more aware of interpersonal dilemmas and the possibility of resolving them, do they seem more attuned to the feedback from others, more ready to test their assumptions against this? It is these details of development that we know so little about and yet which would provide us with such a much better understanding of how the child actually develops.

In addition to its potential theoretical value, it is, I believe, precisely this kind of process information that we should look at to evaluate the value of the program for the child. For as I earlier argued, although it may be theoretically interesting to see if we can stimulate stage change, this should not be the goal of the educator working with regular children. Rather, for this child, the goal of social development intervention should be to ensure that the child develops the kind of feedback system—the ability first to recognize when there is a conflict between his assumptions and social reality and to learn that his present way of reasoning is not fully adequate to resolve the problem, and the tendency to try to resolve this dilemma by reconsidering his basic assumptions and seeking more adequate resolutions—that will contribute to his broad application of perspective taking ability and his eventual development and use of the highest levels. We should be trying to instill a process of interaction, not a result.

Because of our early thought that close attention to the process that occurred in the classrooms would lead to fruitful theoretical information and to the most valid estimation of the effects of this program on the child, we included in our study several attempts to get this kind of information. Our purpose was to see if we could detect changes in the kind of social interactions we felt might be related to social development--increased feedback between children, greater attention to others' viewpoints and feelings, greater awareness of conflict and interest in trying to discuss the most adequate resolution. Further, frankly aware of how very little we really know about this process, we attempted to be very exploratory and to develop some new ideas as to the kind of changes that might occur which could then be examined more formally in later studies.

And if I could choose any one thought to impress on you today, it would be how much more valuable we found this kind of evaluation than our traditional outcome analyses. Because, I must admit, we only had an inkling that this would be the case, we focused the majority of our efforts on the more traditional outcome measures. As a result, the form of our process evaluations is very informal and our conclusions from them frankly speculative. Nonetheless, let me briefly describe for you what we did and the impressions we gained from this in the hopes that future studies can proceed from here in a more formal and organized fashion.

First, we added to the regular test battery a "group interaction measure" designed to evaluate the degree to which the children spontaneously focused on other's feelings and thoughts as well as the kind of social interaction and feedback occurring among the children. The results were very interesting. It indicated that by the end of the intervention, the experimental children, to a greater degree than the controls, were focusing more on the interpersonal aspects of situations they were discussing. Thus, for instance, in telling a

joint story about an ambiguous picture of children playing together, the experimental children tended to include more comments about how one of the children who was seen standing outside the group was feeling and how the others reacted to him rather than focusing only on the children's actions. We also found a trend among the experimental children for increased group interaction and interdependence: for instance, in telling joint stories or deciding as a group what kind of present to get for the teacher, the experimental children tended to interact more closely, listening to others' ideas and responding directly to them.

In addition to this formal measure, we designated two of our classes "process" classes and did extensive observations as well as videotaping and tape recording in them. Further, to learn their ideas about the program and its effects, all teachers and a variety of students were interviewed following the intervention. Perhaps the most interesting evidence of the program's impact came from these data, particularly from the interviews with the children themselves. As could be expected, some children, generally those described by the teachers as less intellectually mature, apparently missed the point of these conflicts. Asked what they learned from the films and why they thought they saw them, for instance, one child maintained he had learned "not to cut in line, and not to climb trees in case you can't get down." Asked if any of his classmates had changed as a result of the program, this same child said "We've changed--we don't cut in line now because of the films" and another argued "Yea, a lot of bad kinds are turning into good kids." Another firmly maintained "we get more 100's now." Although such endorsements by the children are interesting and perhaps indicative of the fact that the children liked the program, they suggest to the developmental psychologist that for these children the effort to get them to recognize an interpersonal conflict situation has failed.

However, the majority of children at the program's end seemed to feel they

had become more aware of both the presence of interpersonal dilemmas and the value of discussing with others the best resolution. When asked whether it was more important to give the right answer or the best reason, one child replied:

> The reason . . . because if you told just the answer it's very hard and you can never figure it out—but if you tell the reason it lets you . . . because when you just think on your own you might think wrong--there might be better reasons from other people.

In the same vein, another commented that the most important thing that she had learned was:

> That all the stories had a problem and sometimes they could solve it themthemselves . . . the children could solve it out themselves . . . and sometimes they need a bigger person to help them solve it out . . . because kids might not think that it's really a big problem . . . then when they try it, it might seem like it's a big problem.

Finally, a third child commented that she liked the discussions better than just seeing the films because:

> We had to think of what we wanted before we said it . . .after the movie you might want to know other people's good reasons, good reasons from other people. Because you might just think 'well he shouldn't do that' and then you can change your mind. If you were just guessing then . . .it's not good just guess.

Both our own observations and teachers' comments lend support to the children's contentions first that they tended to recognize interpersonal dilemmas more readily and secondly that they became aware of the value of testing out their own ideas as to the best resolution on others as a result of the intervention. For instance, all of our observers and most of our teachers felt that during the course of the intervention the children became much more able to recognize the interpersonal dilemmas in the film—by the end the children could restate the problem much more easily and seemed more ready to accept it as an issue that needed resolution. Further, we saw some extension of this focus into other non-film situations. As earlier noted, this increased interpersonal focus by experimental children was seen in our group process measure. Finally, even in the limitdd time we were in the classrooms we saw some evidence of extension of this focus into real classroom situations. In one of our classes, for instance several second graders spontaneously

went to the teacher near the end of the program and told her that this kind of problem often occurred to them and asked if they could write their own stories to discuss and resolve. And a second teacher, who invariably referred to the films as "dilemmas" reported that a group of his third graders ran up to him in lunchroom one day and announced "we have a real dilemma" in response to a child trying to break into the lunch line.

Similar kinds of evidence also support the idea that at least some of the children became more inclined to listen to others' ideas and to test their own ideas against them as well as becoming more comfortable about changing their minds if they decided others' reasons were better. Observers and teachers both noted that at first the children seemed very concerned that there was no resolution to the dilemma in the films and very uncomfortable with the notion that they could reason out the answer or change their minds on the basis of new evidence. They frequently demanded that the teacher tell them "what really happened" or "what's really the right answer." In one extreme case, an entire class insisted that they had heard a parrot in the film whisper "Susan did it" in a dilemma revolving around trying to figure who might have let the bird out of his cage. One of the children we interviewed beautifully illustrated this difficulty in dealing with uncertainly in his description of why he did not like some of the dilemmas. They were hard, he said:

> because the way their problem had to be solved--like sometimes I couldn't really think and I would have to be in the middle. Like sometimes I would think this thing and sometimes I would think both and what we'd have to do is go in the middle of a circle. The people would try to really think about two things . . . and sometimes I got confused like that and I don't like the stories because I can't figure out what ones to pick sometimes.

Although even at the end the children were not fully convinced that there was no right answer, there did seem to be increased legitimization of changing your mind when new reasons were introduced and increased acceptance that one could be surest of reaching the best answer by discussing the possible resolutions and learning other's ideas about it. Thus, for instance, the discussions tended to

last longer and children showed more tendency in discussions and debates to change position because of reasons presented. Further, the children seemed considerably less dependent on the teacher for the answer and more interested in and comfortable with reaching their own decisions in their discussion groups.

Finally, over the course of the intervention we felt that there was considerable change not only in individual children, but also in the interaction of the groups. Several observers, for instance, noted an increase in the children's desire to convince and persuade one another, and in their efforts to make their ideas clear and to try to understand what others were really trying to say. By the end of the intervention, for example, we heard comments such as "I don't get it" or "you're just saying the story again" much more frequently. This observation, as I noted, received tentative support from our group process measure which revealed more group interaction and interdependence among experimental than control children by the end of the program.

These observations are admittedly tentative, admittedly made by biased observers--children who liked the program and adults who were interested in its success--but nonetheless very exciting. For I think they point to a useful direction for future evaluation of such interventions and provide us with some intriguing insights into what really might be going on in children and in groups of children as they develop to more mature levels of social reasoning. Of course we cannot now be sure whether the things we have observed here--increased tendency to recognize interpersonal dilemmas, increased interest in getting feedback about one's reasons from others and increased willingness to change one's mind as a result, decreased anxiety about uncertainty or need for "the" answer--are in fact related to stage change or even to a broadened use of existing stage of social reasoning. And it would seem a useful goal for future intervention studies to try to study more fully these kinds of changes and discover if and how such daily process variables are related to the structure and use of a child's developing social reasoning abilities.

Footnotes

1. This research was partially supported by a grant from The Spencer Foundation and partially by a grant from Guidance Associates, New York, New York, publisher of the curriculum.

I would like to express my appreciation to Dan Jaquette, Debbie Lavin, Bea Borowski and Nancy Jacobs for their time-consuming interviewing of the children, and to the students of P-262, Harvard Graduate School of Education for their help with the observations. Finally, I would like to thank Bob Selman for his continual guidance and support throughout the time of this project.

2. These filmstrips, entitled First Things: Social Reasoning (developed by R. Selman and D. Byrne) and First Things: Values (developed by R. Selman and L. Kohlberg) are published by Guidance Associates, Division of Harcourt, Brace, Jovanovich, New York, New York.

References

Cooney, E. & Selman, R., An experimental intervention in social cognition. Harvard Graduate School of Education, in preparation.

Selman, R. A structural-developmental approach to conceptions of interpersonal relationships: studies of normal and disturbed preadolescents. To appear in, Pick, A. (Ed.), X Annual Minnesota Symposium on Child Psychology, Minneapolis, University of Minnesota Press, in preparation.

Selman, R. & Lieberman, M., Moral Education in the Primary Grades: an evaluation of a developmental curriculum. To appear in Journal of Educational Psychology, in press.

Turiel, E. Developmental processes in the child's moral thinking. In P. Mussen, J. Langer & M. Covington (Eds.), Trends and Issues in Developmental Psychology. New York: Holt, Rinehart & Winston, 1969.